



Region 2 Enforcement & Compliance Assurance Division
Air Compliance Branch

CAA Inspection Report

Inspection Date: 9/14/2022
Facility Name: Bell Flavors & Fragrances
Facility Address: 12 Sprague Avenue, Middletown, NY 10940
ICIS-Air ID #: NY0000003330900061
Facility Contact: Paul Bromley, Manager, pbromley@bellff.com
EPA Lead Inspector: Phillip Ritz, Environmental Scientist; ritz.phillip@epa.gov
EPA Asst. Inspector: Richard Kan, Environmental Engineer; kan.richard@epa.gov
State Inspector(s): Dylan Kahlstorf, NYSDEC inspector; Dylan.Kahlstorf@dec.ny.gov

Pertinent Regulatory Requirements

- Minor Source - 6 NYCRR Subpart 201-4
- NYSDEC has a minor source permit renewal application for this facility.

Facility Information

Bell Flavors & Fragrances uses a mixture of organic compounds to produce fragrances, botanical extracts, and butter flavors used in food grade and other consumer products. The shipping area sends about 18 orders a day to global destinations.

Raw material is trucked in. The manufacturing process is liquid compounding of botanical products, similar to steeping tea to extract scent. About 13,000 kg of product is manufactured each month. The finished products are shipped out as solids, powders, and liquids.

The seven emission points at the facility are two spray dryers, three butter reactors, an emulsion tank, and a common exhaust for three powder blenders (V blenders). A wet scrubber is utilized with each of the spray dryers for emission control. A condenser is used with each of the butter reactors to collect the volatiles. The emulsion tank and powder blenders are vented to dust collectors, which reduce particulate emissions.

Onsite Inspection

EPA inspectors arrived at the facility at 9 am and met with NYSDEC inspector, Dylan Kahlstorf. We toured the publicly accessible streets and rail-to-trail areas nearby. We viewed the manufacturing and storage buildings from offsite.

We then entered the facility for an opening conference and met with Paul Bromley, Manager, Engineering & Facilities; Michael Smith, Senior Director, Manufacturing-Fragrance. We informed them we were conducting a full compliance evaluation and follow-up to an earlier GMAP (Geospatial Mapping of Air Pollution) event. The director said the facility has 58 employees working 5 days a week, from 7 am to 12 midnight. The environmental consultant for the facility is Mostardi Platt. Bell Flavors purchased the former Hercules plant in 1994. Hercules split their property and sold a portion to Bell Flavors and the rest to nearby Fleurchem.

Summary of Observations

1. Part 1

- We observed two levels to the main building, an office on top and processes on the ground floor.
- At 11:30 am, EPA inspectors walked through the facility to the receiving and processing areas. The entire building is air conditioned for employee welfare.
- The facility representative, Michael Smith, said the Fragrance Plant has a spray dryer for food production, and a butter room.
- There is one spray dryer for fragrances and a second spray dryer for food products.
- The facility uses an electric boiler for process heating.
- Small amounts of alcohol are used as solvents for fragrances. The fragrance area emissions go to a carbon bed, replaced each year. Fragrances are received and shipped in plastic totes. Surfactants are delivered by tanker truck.
- The fragrance compounding area is adjacent to the botanical warehouse. The fragrance process makes a slurry of the botanicals, sending the material in a blower system to a blender where chemicals are added, mixed, and then packed for shipping. To manage odors, the fragrance production vents to a carbon bed.
- The waste drains are kept sealed.

2. Butter Room

- The butter flavor is an enzyme reaction from butter oils. The facility representative said the butter room heats the product to 80°C.
- The butter room heats to separate materials and has a kill enzyme step, without exhaust to the atmosphere. Separate rooms are sealed (DEA room, fragrance room, butter room).
- The butter room blends a derivate and ester together.

3. Building 21

- We discussed the discoloration and residue on the roof of Building 21.

4. Building 10

- The fragrance spray dryer in building 10 had a black residue on the roof.
- We saw that fragrance processing uses a hot plate. The spray dryer uses a gas burner.

5. Building 15

- The spray dryer in building 15 is for food grade fragrances. The spray dryer rooms exhaust to a wet scrubber for particulate control.

6. Building 16

- The gas boiler in building 16 was disconnected. There is no backup generator on site.
- We finished the walkthrough at the decommissioned American standard boiler in building 16.

7. Closing

- We returned to the conference room at 12 noon. At the closing conference we discussed the spray dryers. The facility representative said the possible discolorations on Buildings 10, 15 and 21 roofs near the exhaust vents could be from years of buildup. We asked for more info on the spray dryers, safety data sheets, and VOC calculations used to determine the facility potential to emit. We ended the inspection at 12:30pm

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11/14/2022

X Phillip Ritz

Lead Inspector
Signed by: PHILLIP RITZ

Assisting Inspector's Name: Richard Kan, Environmental Engineer

11/14/2022

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Assisting Inspector
Signed by: RICHARD KAN

Supervisor's Name: Nancy Rutherford

11/14/2022

X Harish Patel

Supervisor
Signed by: Environmental Protection Agency